

Notice of Allowability

Application No.

10/791,632

Applicant(s)

AGARWAL ET AL.

Examiner

Art Unit

Zhuo H. Li

2185

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3/2/2007.
2. ☒ The allowed claim(s) is/are 1-30.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____



EXAMINER'S STATEMENT OF REASONS FOR ALLOWANCE

1. Claims 1-30 are allowed over prior arts.
2. The following is an examiner's statement of reasons for allowance:

Applicant's invention is drawn to a packet switching systems in a communications network and method for identifying a combined ordering of masks corresponding to a plurality of access control lists in order to reduce the number of block masks required for programming multiple access control lists in an associative memory (i.e., the multiple access control lists is generated in an n -dimensional array, each axis of the n -dimensional array corresponds to masks in their requisite order of different one of the multiple access control lists, and the n -dimensional array progressively identifies numbers of different masks required for subset orderings of masks required for subsets of the multiple access control lists, and the n -dimensional array is traversed to identify a sequence of masks corresponding a single ordering of masks including masks required for each of multiple access control lists, which it provides greater speed and capacity in a communications network).

Applicant's independent claims 6, 11, and 21 each recites, *inter alia*, memory (100) with a structure as defined in the specification (pages 13-18) including steps for generating an n -dimensional array wherein each axis of the n -dimensional array corresponds to masks in their said requisite order of a different one of the plurality of access control lists, the n -dimensional array progressively identifying numbers of different masks required for subset orderings of masks required for subsets of the plurality of access control lists, and traversing the n -

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dimensional array to identify a sequence of masks corresponding to a single ordering of masks including masks required for each of the plurality of access control lists, wherein the single ordering of masks maintains the ordering of masks required for each of the plurality of access control lists with one or more masks corresponding to a different access control list or other feature in between one or more consecutive masks of an access control list of the plurality of access control lists. Applicant's independent claims 6, 11, and 21, each comprises a particular combination of elements, which is neither taught nor suggested by the prior art.

Applicant's independent method claims 1 and 16, each recites, *inter alia*, generating an n -dimensional array wherein each axis of the n -dimensional array corresponds to masks in their said requisite order of a different one of the plurality of accessing control lists, the n -dimensional array progressively identifying numbers of different masks required for subset orderings of masks required for subsets of the plurality of access control lists, and traversing the n -dimensional array to identify a sequence of masks corresponding to a single order of masks including masks required for each of the plurality of access control lists, wherein the single ordering of masks maintains the ordering of masks required for each of the plurality of access control lists with one or more masks corresponding to a different access control list or other feature in between one or more consecutive masks of an access control list of the plurality of access control lists. These steps, in combination of the remaining steps, are neither taught nor suggested by the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

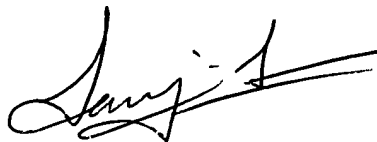
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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zhuo H. Li whose telephone number is 571-272-4183. The examiner can normally be reached on Mon - Fri 10:00am - 6:30pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sanjiv Shah can be reached on 571-272-4098. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

4. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



SANJIV SHAH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Zhuo H. Li



Patent Examiner
March 13, 2007